

Parcel C ESD RTCs

**Hunters Point Naval Shipyard
BCT Meeting
September 4, 2014**

Seven comments of concern



- Significance of changes
- Justification for using tiered approach to excavate metals
- Rationale for including PCBs in tire approach
- Leaving PAH concentrations above RGs
- Remedial Goals are changing
- Residual manage could leave a site-related risk
- Suggested text change to clarify the purpose of the tiered approach

DTSC comment #5



- Comment: The evaluation provided needs to be expanded. Are the changes in the post-ROD remedy considered to be non-significant or minor, significant, or fundamental? What are the administrative requirements?
- Response: The type of change is considered to be significant since the tiered approach results in scope reduction and cost minimization but does not fundamentally alter the overall cleanup approach of excavation and protective cover. The ESD will be presented at upcoming BCT and public meetings and a notice will be published in local newspaper and copies will be placed at designated repositories.

Water Board #6



- Comment: Please revise the text to list the specific ubiquitous metals and organic chemicals. Please expand the technical justification for why a tiered approach for ubiquitous metals is appropriate given the RGs already take into account levels of metals naturally occurring in the fill material.
- Response: As indicated in Section 4.1.1, the tiered approach was applied to metals (excluding mercury) and polychlorinated biphenyls (PCBs) only. The last paragraph of Section 4.1.1 was revised to explain that the specific ubiquitous metals and PCBs that are addressed using the tiered approach are shown in Table 4-1; boldface type in Table 4-1 indicates the COCs (metals and PCBs) for which the RG and action level differ as a result of applying the tiered approach. A paragraph was added to Section 3.0 to provide a better explanation of the tiered approach and how metals with concentrations at 5x and 10x the RGs would still be protective of human health. The implementation of the tiered approach does not change the soil RAOs as the revised approach still prevents or minimizes exposure to chemicals at concentrations above the revised RGs at these locations.

Water Board #9

- Comment: The first sentence of the third paragraph states that the tiered approach was applied to PCBs, which are neither ubiquitous nor sourced from the local rock. Please revise the text to provide the rationale for including PCBs in the tiered approach.
- Response: The BCT and the Navy discussed and agreed to include metals (excluding Mercury) and PCBs in the tiered approach during three separate TRIAD meetings held during the period from September 2012 through March 2013. Additionally, comments from the BCT were provided and addressed in a response-to-comments document included in the Final Technical Memorandum Soil Excavations, Parcel C Remedial Action, Remedial Units C1, C2, C4, and C5, and Building 241, Hunters Point Naval Shipyard, San Francisco, California issued in August 2013. Because of the immobile nature of PCBs, the BCT agreed that the durable cover would serve as a remedy to prevent exposure to humans and the environment as long as the risk assessment showed no risk to the construction worker.

Water Board #13



- Comment: The ESD proposes to remove this excavation area such that no further excavation would take place. However, Figure 4-12 shows PAH concentrations above RGs. Leaving soil with PAH concentrations exceeding RGs is not consistent with the proposed tiered approach. Please revise the text to provide justification for removing this excavation area given the PAH exceedances.
- Response: Although residual PAHs are detected at excavation area 24-3 at concentrations exceeding RGs, the cumulative residual risk for area 24-3 (excluding arsenic and vanadium, for which concentrations are statistically similar to background) does not exceed the risk management range of $1E-04$ to $1E-06$ and the HI is less than the threshold of 1. Also, detections of residual PAHs above the RG were at concentrations slightly exceeding RGs and were limited to one location at area 24-3 (IR28B243, 8.75 feet bgs); residual risks were estimated using residual PAH detections at this location only - a very conservative approach. During three separate TRIAD meetings between September 2013 and March 2013, the "no action" approach at Excavation 24-3 was discussed with the BCT; the BCT agreed that the "no action" approach was valid.

EPA #1



- Comment: Page 1-1 of the ESD states, "Implementation of these tiered action levels for the excavation portion of the selected soil remedy will not change the RGs as presented in the Final ROD." Table 3 in the ROD identifies specific, numerical RGs. As reflected in the text and Table 4-1, those numbers are changing because they are now being multiplied by either 5 or 10. As EPA mentioned in the March 27 BCT meeting, the ESD should clearly reflect what is actually going on with respect to RGs — they are changing. It would be more accurate for the Navy to say that the RGs are being revised in some instances based on a tiered approach, but RAOs remain the same. The ESD should be clear that the RAOs are not changing as long as the remedy will still prevent or minimize exposure to chemicals at concentrations above the revised RGs.
- Response: The Navy acknowledges that application of tiered action levels for the excavation portion of the selected soil remedy will result in changes to the specific numerical RGs identified in the ROD, and the Navy agrees that the RAOs remain unchanged. Accordingly, Sections 1, 3 and 4 of the ESD have been revised to be consistent with the understanding that applying the tiered approach will result in a change to the RGs, and scope reduction and cost reduction, but no change to the RAOs and no fundamental change to the overall cleanup approach of excavation and protective cover.

EPA #3



- Comment: Section 4.1.1 Tiered Approach, Page 4-3, states, "Although some excavation areas have estimated residual hazards above 1.0, these slightly elevated hazards are a result of ubiquitous metals. Residual concentrations of manganese in Excavation 23-1 and Excavation 24-5, ... , are similar to background." While a value of 1.5 may be considered "slightly elevated" based on a manganese level "similar to background", the fact that the HPAL already takes into account the variability of background, it is more difficult to claim that the higher HI of 4.1 is due to background, especially when no site history for this area is provided. It needs to be clear that because the HI exceeds 1.0 without background, it could represent a residual site-related risk or possibly an unusually high background outlier, but that it still meets the RAO.
- Response: Sections 4.1.1 and 4.2.2 have been expanded to explain that an HI above 1.0 (due to manganese) could represent a localized site hazard but that RAOs would be met. Past studies were conducted on Hunters Point Naval Shipyard (Ambient Manganese at HPS – Dec 2001 and Metals in Franciscan Bedrock Outcrops – March 2004. Studies concluded that the highest concentrations of natural manganese in rocks of coast California are found in chert and basalt contained in the Franciscan Complex. Excavations 23-1 and 24-5 fall within an area with this rock assemblage. Also, manganese concentrations in these excavations are generally statistically similar to background (based on background hypothesis testing using EPA ProUCL Software.

City #9



- Comment: Suggest revising section for clarity, as follows: Reduction of excavation volumes was based on use of Tier 1 and Tier 2 action levels. The screening level HHRA was performed to confirm that the risks and hazards associated with exposure to concentrations lower than the Tier 1 and Tier 2 action levels fall within the acceptable risk management range. In addition, the cover serves to break the exposure pathway for COCs left in place. Therefore, the performance of the remedy in regards to protectiveness of human health and the environment is not affected.
- Response: The section now states: Based on this evaluation, the Navy considers these changes to be significant. Application of tiered action levels for the excavation portion of the selected soil remedy will result in changes to the specific numerical RGs identified in the ROD. The tiered approach results in scope reduction and cost minimization but does not alter the RAOs or the overall cleanup approach of excavation and protective cover. The cover ensures the contaminant pathway is broken and the tiered approach does not result in an unacceptable risk.